

MOUNTAIN AGRICULTURE

Conducted by Mr. Robert F. Spence, Farm Demonstrator and Special Investigator

SILOS

We need more silos in this section of Kentucky. Farmers who feed cattle on hay, fodder and straw and waste the manure are losing money every year. Not only wasting money but are running their farms down.

The silo is one of the biggest soil builders in the country. In Warren County the silo is considered to be the farmer's bank. Nearly all farmers have their silo. They say they can't afford to feed cattle without it. All the manure is kept in the barn during the winter. New bedding is put in on top of manure and tramped by cattle. In the spring or fall, which ever it may happen to be, when the cattle are sold, the manure is hauled out and scattered with a manure spreader over the land. This is money to the farmer and food for the soil.

Professor Raine, of Berea, is building a stave silo this week. He sees where it will pay him a good profit to put his corn in a silo and feed his cattle inside barn and save the manure.

Farmers, go and watch the construction of Professor Raine's silo. After you see it sit down and count the cost, if you have cattle, and build one on your own farm. It will pay.

SOMETHING TO DO NOW — SEPTEMBER

Last Saturday a farmer came in my office and we were discussing the importance of selecting and caring for seed corn. He said he lost at least \$200 by not selecting and caring for his seed corn and other seeds last year.

Take warning my farmer friend, and select your seed corn this fall while you have plenty of time. Do it while you are passing through the field admiring your crop. Remember if you have a good strain of corn it doesn't pay to buy from someone else. Follow the following rules and select your seed corn this fall. These rules have been sent to all corn club boys in my territory. I have asked them to follow same rules and select their seed corn for next year, also to select the ears of corn to bring to our Berea Corn Show and Fair last of October.

Rules for selecting seed corn:

1. Secure from hills with two or more stalks.
2. Secure from stalks bearing two or more ears.
3. Secure ears at proper height from the ground.
4. Secure shanks of medium length with ears hanging down.
5. Spread out the seed in a dry, warm place.
6. Select ears well rounded over at tip ends.
7. Select ears large around.
8. Select ears with small cob and large kernels.
9. Select ears with wedge-shaped grains.
10. Select ears with grains in straight rows.
11. Select ears with grains rather smooth-dented.
12. Select ears with grains plump and firm on cob.

Advantages of Selecting From Standing Corn

You can readily see that it would be impossible to avail yourself of the first four rules unless you select your seed from standing corn. It may be well to point out a few of the reasons for these four rules:

In the first place, an ear that has grown in a hill of two or more stalks that grew by itself is naturally a more vigorous one and should make better seed, other things being equal. Again if you take your seed from stalks of two ears on them even if not quite so large as where only one ear grew on a stalk, you can in a few years develop a strain and is equally as good as another of corn that will almost invariably

ONE EGG OUT OF FIFTY GETS BROKEN

Farm and Fireside says:

"Two per cent of all eggs sold are broken before they get to the consumer. Two per cent more are dirty. The total loss from all causes is over one sixth the total egg crop."

250,000 AMERICAN HORSES AND MULES ALREADY SOLD TO EUROPE

In the current issue of Farm and Fireside appears the following statement of interesting facts about the sale of American horses and mules since the war broke out:

"We have been selling horses abroad to the number of 25,000 annually. Their average value has been \$142.

"Mules have been exported to the

produce two ears to the stalk. Therefore select best ears from stalks with two or more ears.

Then it is of advantage to have ears from three and a half feet to five feet from the ground, not only because it is easier to handle, in cutting, stripping, and topping, but also your corn will ripen more uniformly and all be ready to harvest at nearly the same time.

Lastly it is a waste as well as an inconvenience to have ears with shanks a foot long. And again if shank is short and stiff, holding the ear in an upright position it allows rain water to run in and injure the grain. Whereas, if the shank is moderately long and limber enough to allow the ear to hang top downward, the husk drains the rain and dew all off, and the ears keeps perfectly dry even if left out all winter in the field.

Everyone should know that freezing injures seed corn if it is not thoroughly cured and dry. Even then it does it no good. So be on the safe side and store your seed corn in a warm, dry place such as around the chimney upstairs in the house.

I visited one of our students who was in the Agriculture Certificate Course last year and found that he had selected seed corn as recommended and had it tied together by strings and placed upstairs by the chimney. This boy is going back to Berea this year, 1915, to continue his Agricultural Course.

COWPEA SEED AND COWPEA HAY

Pick all the ripe pods of cowpeas this fall and save them as they are scarce in this section. Don't let one go to waste—as far as I have been in Madison, Estill, Jackson and Rockcastle counties I find that cowpeas are not podding this year like they did last year. I also noticed this in Tennessee. This perhaps will cause cowpea seed to be higher next year. Pick all you have ripe and watch for more every day.

Time to Cut Cowpea Hay

The best time to cut cowpeas for hay is when many pods are full-grown and a considerable number are ripe. At this stage nearly all the leaves will be on the vines and the leaves are the best part of the hay.

This rule can't be followed this fall because many peas are not podding and yet losing their under leaves—tops remaining green. Examine your peas and if the under leaves are turning yellow and falling—cut as soon as you can. You don't want to lose the leaves.

The peas should be cut after dew dries off and before noon, and should lay in swath until well wilted but not till dry and brittle. They should then be raked into windrows. This generally is the day after mowing.

They should lay in windrows a day or two and then be put into small shocks. They should stay in shock several days, before stacking or putting in the barn. Put the hay in the barn if possible. If you must stack it, have some timothy, or other good water shedding hay to top out with, for pea-hay spoils very quickly when wet.

THOUGHTS FOR THE DISCOURAGED FARMER

By James Whitcomb Riley

They's been a heap o' rain, but the sun's out today, And the clouds of the wet spell is all cleared away.

And the woods are all the greener, and the grass is greener still; It may rain again tomorrow, but I don't think it will.

Some says the crops is ruined, and the corn 's drowned out,

And proph-a-sy the wheat will be a failure, without doubt; But the kind Providence that has never failed us yet,

Will be on hand one't more at the 'leventh hour, I bet!

number of 5,000 a year, valued at \$150 each.

"Since the war broke out we have sold abroad 215,759 horses at an average price of \$220, and 39,229 mules valued at over \$190 the head. That is, we shipped away in ten months nearly as many horses and mules as in the past eight years.

"The man who has a breeding mare may well study these figures.

"There may be no present scarcity of horses and mules in this country, but if the war continues there will be. It will pay to raise colts. And for the man who has salable horses and wishes to equip himself with tractors or motor-driven carriages, the present time would seem to be favorable for making the shift."

Therefore, if you want to keep your brain and thoughts out of temptation, read and learn; get useful knowledge.—Charles Kingsley.

MAKING ENDS MEET

"If debt is to be avoided, expenses must be kept on the right side of income."—Dr. Geo. C. Lorimer.

Under present conditions, many heads of families are finding it increasingly hard to make ends meet, while as far as making them lap a little, that seems impossible, they say. But that is what must be done if any progress or any provision for the future is to be made.

Every man ought to know that if he has good health but does not get on in the world and accumulate something, he alone is to blame. The opportunity has been before him.

The best helper in any man's life is a good wife. She puts hope in the heart of a man and inspires him to do his best; she assists him to save money and sets the example herself, but she may not know how to save wisely.

Lack of thrift in household buying is generally considered a cause of the high cost of living. The old-time grocer never expected to sell less than a whole ham or a shoulder or a side of bacon, a bushel of cornmeal, a peck to a bushel of beans, a peck of dried apples. A ten-gallon keg of molasses was a common sale, almost never a sale of less than a gallon and when the smaller quantity was purchased buyers always brought their own jugs.

Now people buy 10 cents worth of corn syrup and must have it in a tin can that costs 3½ cents to make. In place of bringing a jug and getting a gallon of vinegar for 20 to 30 cents they buy the same sort of vinegar in bottles so it costs them 80 cents to \$1 a gallon. They must have their ham and bacon cut up in certain sort of slices, regardless of the waste, buyers taking only enough for a single meal, say 10 to 25 cents worth.

Another thing, people now buy the hard staples of living in what we may say are infinitesimal quantities. The storeroom in the home is a rare thing. Many families now make separate purchases for every meal; they send or telephone to the grocery a dozen times a day. It costs the grocer almost as much to sell and deliver each 10-cent sale as a \$5.00 one.

If the boys and girls in the public schools could be taught elementary facts in regard to marketing, as well as the importance of saving and depositing in the bank, it would be a great national benefit.

A FARMER'S SCHEME TO SAVE TIME

In the current issue of Farm and Fireside, a contributor describes several practical ways in which farmers, by spending minutes, can save hours. The article is full of time-saving suggestions similar to the following:

"Bringing horses up from pasture in the morning takes considerable time if the pasture is large. One Missouri farmer having 20 horses, saved about three fourths of that time by keeping one horse up each night and riding out after the others in the morning. Half a dozen of the horses were fair riding horses, and those were used in rotation so that no horse was kept up more than once a week. It was just the work of a moment to put on the bridle. The use of a saddle was scorned as a time-consuming luxury.

CINCINNATI MARKETS

Wheat—No. 2 red \$1.14@1.15, No. 3 \$1.08@1.10, No. 4 95c@1.04, sample red winter 79¢@90¢.

Rye—No. 2 93½¢@95½¢, No. 3 88¢@91¢, No. 4 80¢@87¢.

Corn—No. 1 white 78c, No. 2 white 77½¢@78c, No. 1 yellow 78½¢, No. 2 yellow 78¢@78½¢, No. 1 mixed 78c, No. 2 mixed 77½¢@78c, white ear 76¢@78c, yellow ear 77¢@79c, mixed ear 76¢@78c.

Oats—No. 2 white 44¢@45c, standard white 41¢@42c, No. 3 white 37½¢@38c, No. 4 white 33½¢@34c, No. 2 mixed 34¢@35c, No. 3 mixed 33¢@34c, No. 4 mixed 31¢@33c.

Mill Feed—Bran 22.50@22, mixed feed 24.50@24.50, middlings, coarse 27.50@28, middlings, fine 29¢@30.

Hay—No. 1 timothy \$17.50, No. 2 \$16.50@16, No. 3 \$13.50@14, No. 1 clover mixed \$14.50, No. 2 \$12.50@13, No. 1 clover \$12.50, No. 2 \$10.50.

Eggs—Prime firsts 25c, firsts 22½¢, ordinary firsts 20½¢, seconds 18c.

Poultry—Broilers, 1½ lb and over, 14c; under 1½ lb, 14½¢; fowls, 4½ lbs and over 14½¢; 3½ lbs and over, 13½¢; under 3½ lbs, 12c; roosters, 9c; spring ducks, 3 lbs and over, 14c; 2 lbs and over, 12c; ducks, white, 4 lbs and over, 12c; white, 3 lbs, 11c; hen turkeys, 3 lbs and over, 17½¢; tom turkeys, 10 lbs and over, 17½¢; turkeys, crooked-breasted, 6¢@8c.

Cattle—Shippers 56¢@58, extra 58.15¢@60; butcher steers, extra 57.50¢@7.50, good to choice 56.40¢@7.40, common to fair 54.65¢@6.35; heifers, extra 57.35¢@7.50, good to choice 56.35¢@7.25, common to fair 54.25¢@6.25; cows, extra 56.25¢@6.50, good to choice 56.75¢@6, common to fair 52.75¢@4.75; canners 52.50¢@3.50; stockers and feeders 54.50¢@7.50.

Bulls—Bologna 55¢@5.75, extra 56.50¢, fat bulls 54¢@5.50.

Calves—Extra \$11, fair to good 97.25¢@10.75, common and large 85¢@11.50.

Sheep—Extra light 35.20¢@5.40, heavy 35¢@5.25, good to choice 34.85¢@5.75, common to fair 32.60¢@4.65, stock ewes 34¢@7.

Horticultural Points

CAUSES OF FRUIT FAILURES

Many Varieties of Apples and Pears Are Self-Sterile—Pollen From Other Trees Remedies.

(By W. W. ROBBINS, Colorado Experiment Station.)

The failure of orchard trees to set fruit, in spite of the fact that an abundance of blossoms is produced, is due to one or more of several causes. These are as follows:

1. Self-Sterility—Many varieties of apples and pears are self-sterile. That is, they are not capable of setting fruit properly unless pollen from another variety is used. For example, Bartlett and Kieffer pears, in many locations, where they are planted in solid blocks, give less satisfactory results than when they are planted with such varieties as Lawrence, Duchess and Anjou. With apples and pears it is good practice to mix varieties. However, if varieties with proper affinities are selected, one variety to furnish the pollen is as good as a number.

2. Frozen Pistils—The pistil, the part of the flower to develop fruit, is more easily frozen than other parts of the flower. Hence, the pistil may be frozen while other flower parts are not affected, consequently blossoms are formed but fail to set fruit.

3. Weak Trees—Trees in a weak condition, although blooming abundantly, often fail to set fruit.

4. Rain and Snow—The pistil may be mechanically injured and the pollen washed away by rain or snow at the time when the blossoms are open.

5. Excessive Growth of Wood—Blossoms often drop in great numbers when the tree is forming an excessive amount of wood.

6. Overabundance of nitrogen fertilizers.

7. Diseased buds.

8. Sprayed—Heavy spraying of trees, especially before pollination, has in some few instances resulted in a loss of blossoms. This is not serious, however.

CAUSES OF APPLE FAILURES

Scab is One of Principal Agents—Can Be Controlled by Thorough Spraying by Orchardists.

Prof. W. Paddock of the horticultural department of the Ohio College of Agriculture recently said, in a talk on the causes of failure in apple crops, that when all is said and done it will probably be found that apple scab is one of the principal agents causing the failure of trees to set fruit.

The fungus which causes apple scab starts into growth in the spring of the



Apple Scab.

year with the tree and by the time the tree blossoms the spores are abundant. These spores are carried in the air to the tender blossoms which they attack and may destroy in quantities.

The little fruits may set, but the attack of fungus saps their vitality and soon most of them fall.

Scab, he said, can be controlled if orchardists will only practice thorough spraying.

KEEPING TRASH IN ORCHARD

Dead Branches, Old Bark and Even Prunings of New Wood Contain Egg Masses of Insects.

The term, keeping the orchard well clean, applies to what may be thrown upon it as well as to what may grow upon it. When pruning and working over the trees don't leave the trash and rubbish to remain where it falls.

Dead branches, old bark and even prunings of new wood may and usually do contain egg masses of insects, hibernating larvae, spores of fungi, etc.

When the work of pruning is done, make a thorough cleaning up, and if you go to the trouble of sweeping up and burning the loose bark that has fallen to the ground, your time will not be profitlessly spent.

Grow Currants.

Currants are hardy, easily cultivated, standing neglect well and liberally respond to cultivation and generous treatment. Set four feet apart in rich ground; cultivate well or mulch heavily; prune out old wood so that each remaining shoot will have room to grow; if the current worm appears, dust with bellerose.

PACKING AND SHIPPING HOUSE, KENTUCKY STATE FOREST NURSERY



TREE PLANTING ALONG PUBLIC ROADS

Remarkable Development of Good Roads Sentiment in Kentucky Has Created a Demand For Shade Trees Along the Roads

The last year in Kentucky has seen a wonderful agitation for good roads throughout the State and at the present time a large number of highways are being constructed under the State-aid plan. There is no doubt but what the number of good roads in Kentucky will increase each year. The construction of good roads and the standardization of roads has created a demand for shade trees along the rights of way to beautify them. In anticipation of this demand the State Forester is paying particular attention to the raising at the State nurseries at Louisville and Frankfort trees particularly adapted for planting along the public highways. A good many species have been suggested and one idea which seems to have a firm root in the public mind and which may undoubtedly

lead to a great deal of good in the community is the planting of nut bearing and fruit trees along the roads. It is felt that in this way, the trees along the highways could be made to produce a product of sufficient value to aid in the maintenance of the road. This has been successfully done in several instances, particularly in Europe. With this end in view the State Forester has been experimenting with a large number of nut trees of different varieties including pecan, hickory, black walnut, English walnut and others. Also the growing of apple trees and other fruit trees along the road is a suggestion which meets with a great deal of favorable comment and the nursery at Louisville has undertaken the growing of apple stock on a large scale.

GENERAL VIEW KENTUCKY STATE FOREST NURSERY LOUISVILLE, KY.—ADJACENT STATE FAIR GROUNDS



This nursery is 25 acres in extent and will include a small experimental forest.

PRESERVE FOREST LANDS

Forest Conservation Concerns Both City and Farm.

Many dwellers in towns and cities feel great interest in forestry and would be glad to give active aid to the cause. Some are doing so by the improvement of forest lands which they own, but there are greater numbers who are not able to do this but who greatly desire to enjoy the forests and to help along any movement tending to their improvement. The preservation of forests for natural scenery; to check the winds and hold back the waters; to stop erosion of valuable farm lands; to harbor birds and animals; to produce materials for building and manufacturing are matters which concern city people as well as those who dwell on farms.

The obligation to protect the forests rests upon all and the opportunity to enjoy them should be enjoyed by all. Cities should own forest parks in which the design should be to get away from the conventional and costly style of landscape gardening now so common in city parks.

Such parks, if made as natural as possible, would cost far less to establish and maintain than other parks and would serve many purposes. They would help to arouse an interest in forestry and to show its practicability. They would afford means of recreation and study, supplementing the courses in school. If the agricultural experiment stations in the different states were enabled to co-operate in the establishment and maintenance of such forest parks, the arrangement would no doubt be mutually helpful, since the work would be started along forestry rather than ornamental lines and its permanency would be reasonably sure.

Forest conservation to many people means the saving of mature trees and nothing more. Real conservation takes into account all that is of value, also that which has a potential value. Correct ideas, regarding values of forest products need an entire re-construction, as upon a proper conception of what constitutes the most es-

sential part of a forest rests the fundamental doctrine of conservation. To save that which is worth but little and to waste that which is full of possibilities shows wrong ideas regarding values, but examples of this kind are very common. Almost every one appreciates the worth of a large oak, walnut or pine tree, but to most people a seedling of the same species is nothing but a weed. It seems hard for any one, who has not studied the rate of growth of trees, to realize that a mature tree makes but little growth and is worth saving only as long as it remains sound, while a thrifty young tree is growing into value at a rapid rate. But little that is really worth while will be done in the care of our timber trees until we come to realize that forest conservation means the saving of trees of all ages and sizes. However, it is gratifying to note that the interest in forestry is growing constantly and that the number of trees planted each year is increasing.

Waiting for the Right Day.

Somebody passed counterfeit dollar on old Uncle Mose, which nearly broke his heart! Weeks later he related his trouble to his employer. "Ah done gib up lookin' for a man what gimme it," he said. "Ah reckon it ain't no us tryin' fer to find him." "Well, it look pretty good for a counterfeit," remarks the other. "Why don't you try to get rid of it?" "Yes, sah, yer, sah. Sho' does look that-way. Some days Ah think mase'f it's good. Guess Ah'll jes' wait fer one of 'em good days an' jes' pass it erlong."

Little or Great?

When ordinary men allow themselves to be worked up by common everyday difficulties into fever-fits of passion, we can give them nothing but a compassionate smile. But we look with a kind of awe on a spirit in which the seed of a great destiny has been sown, which must abide the unfolding of the germ, and neither dare nor can do anything to precipitate either the good or the ill, either the happiness or the misery which is to arise out of it.—Goethe.